City of Vancouver
Water Resource Protection Ordinance
P.O. Box 1995
Vancouver, WA 98668
Office: 360-696-8008 Fax: 360- 696-8460

WRPO
Initial Inspection Report

Operation Name:	Columbia Machine, Inc.	Date:	3/9/04
Operation Address:	107 Grand Blvd.	Zip Code:	98668
Contact Name/Title:	Rick Weil / Safety & Environmental Director		
Operation Phone:	690-1368		
Operation Description:	Equipment manufacturer for concrete products		
Reason for Visit:	Initial site visit		
Operation Representatives:	Grant Matthews / Maintenance Foreman		
Inspectors:	Annette Jakubiak, Kevin Smithline (Pretreatment)		
WRPO Location:	Critical Aquifer Recharge Area		

BACKGROUND OPERATION INFORMATION

Columbia Machine, Inc. has been manufacturing concrete products machinery at its current location since 1948. The latest modification to the business occurred in the early 1990's when an addition was added to the south side of the Machine Shop.

Columbia Machine, Inc. received the Washington Department of Ecology Environmental Excellence Award in May 1998 for reducing the amount of hazardous waste generation from 20,000 lbs to 2,000 lbs per year.

Operation Permits

Permit Number	Permit Type
95-1760R1	SWCAA
WAD009020140	WA Dept. of Ecology Hazardous Waste Generator
2001-01	City of Vancouver Wastewater Discharge Permit

MINIMUM STANDARDS

A. Hazardous Materials Identification and Management

The major hazardous materials identified at Columbia Machine, Inc were methanol, gasoline, and toluene.

Methanol is used for the carbonizing atmosphere in the heat treat furnace.

Toluene is used as a cleaner for the painting process equipment. The equipment cleaning process was not observed during the site visit.

Other major materials used in the manufacturing process include lubricating oils, machine coolants, and paints. Oils are stored in 55 gallon drums in the oil room on the west side of the Machine shop.

Drip pans are in use as well as drum pumps. Oil and absorbent material was on the floor between the closed and labeled drums. A floor drain in this room is connected to the oil water separator.

Non hazardous machine coolants are used to keep the machining equipment from overheating. Waste coolant is stored in a coolant holding tank then treated in an oil water separator to remove oils that have accumulated during use. Oils are skimmed off of the oil water separator into a waste oil tank and later hauled off as waste oil. The water leaving the oil water separator is pretreated to remove O&G, metals, and phenols prior to discharge to the sanitary sewer.

Paints are stored and formulated in the paint room located on the east side of the Machine Shop. The room has two external doors with no elevated thresholds. Paint was observed on the floor in the room with a few dried paint drops visible outside. No obvious spills were observed outside. A floor drain in the room is reportedly connected to a 500 gallon below ground holding tank. The tank was not opened during the visit and the paint application area was not inspected.

Above Ground Containers:

Contents	Material Type	Size	Location/Containment/Comments
Methanol	Hazardous	1000 gal tank	Located outside between north parking lot and Machine shop; double walled with uncovered, bermed secondary containment; drain valve found open to adjacent drywell.
Gasoline	Hazardous	1000 gal tank	Located outside near northeast corner of Machine Shop; double walled;
Toluene	Hazardous	1 x 55 gal	Located in paint storage and formulation room; secondary containment is floor drain to 500 gal underground holding tank.
Oils	Potentially harmful	Multiple 55 gal drums	Located in oil room with floor drain leading to oil water separator; accesses to room via interior door and exterior garage door are raised; drip pans and sorbants in use; oil residues on floor; containers closed; few on containment
Diesel	Potentially harmful	300 gal tank	Located outside on west side of Warehouse; double walled;
Waste oil	Hazardous	950 gal tank	Located outside and west of the Machine Shop;

Underground Process/Holding Tanks :

Contents	Size	Location/Containment/Comments
Waste paint	500 gal tank	Located east of the paint storage and formulation room; floor drains in paint room drain to this tank
Wastewater and coolants	1200 gal OWS tank	Located at ground surface between the above ground coolant holding tank and the above ground waste oil tank
Stormwater	500 gal tank	Located west of Machine Shop and south of office; collects roof drains and stormwater runoff from 1 catch basin south of office.

Hazardous Waste

Hazardous wastes were not addressed at this time.

B. Oil Water Separators

The oil water separator treats waste coolants from machines used to drill, press, turn, shape, weld, clean, and deburr metal parts. Other water sources for the oil water separator include boiler blowdown, steam cleaning and washing, and stormwater runoff from the area between the machine shop and office building. Water discharged from the oil water separator is pretreated before it is discharged to the sanitary sewer.

Oil is skimmed off of the oil water into the waste oil tank four times a day. Once a year, during the slow season, the unit it emptied and cleaned.

C. Fertilizers/Pesticides/Herbicides/Fungicides

Not used on site.

D. Stormwater Treatment Systems

Catch basins located around the oil water separator and between the Office and Machine Shop drain to the oil water separator for treatment prior to discharge to the sanitary sewer. This area also drains stormwater from the loading/unloading area for the oil room.

Catch basins along the northeast corner of the Machine Shop drain east, off site to a combined outfall/infiltration field at 301 Grove St.

The rest of the catch basins on the property drain to drywells or drain fields that infiltrate stormwater on site. Roof runoff and stormwater runoff from the asphalt south of the offices, drains to a 500 gallon underground holding tank then discharges to an old drain field in the gravel area south of the Machine Shop.

Catch basins between the old drain field and the south end of the 1990 Machine Shop addition are the only ones equipped with oil traps. They discharge to a perforated pipe under the concrete near the building. The truck scale drain line is also connected to the newer perforated pipe.

One last drain field is located under the north parking lot with sumps that collect parking lot stormwater runoff along the west fence.

All catch basins are cleaned out once a year during a slowdown in business.

E. Water Wells/Dry Wells

No water wells reported on site.

Dry wells and drain fields are used for stormwater infiltration throughout the site.

GREATER STANDARDS

A. Spill and Emergency Response Plan

Documentation was not reviewed during this technical assistance visit. However, numerous orange 55 gallon drums containing spill kits were located outside around the plant near infiltration catch basins

and tanks.

B. Operational Inspections
Not addressed during the site visit.

C. Training Program
Not addressed during the site visit.

D. Closure Plan
Not applicable.

E. Records Retention
Not reviewed.

COMMENTS/CONCLUSIONS:

- Columbia Machine, Inc. is an existing Class I operation as defined in the VMC 14.26 Water Resources Protection Ordinance.
- Methanol and gasoline are stored in double walled tanks. All secondary containment drains should be kept closed except to drain clean rain water out of the containment.
- Currently, the largest water resources concern at Columbia Machine, Inc. appears to involve potentially harmful oils which are used in large quantities throughout the site. Oils are recovered for disposal via an oil water separator that is connected to isolated, nearby stormwater catch basins and a floor drain in the oils storage area. This oil water separator system occasionally is overwhelmed by stormwater which causes a backup in drain lines to rooms in the building and potentially backups to some outside catch basins. During the site visit, 55 gallon drums were storing excess water that required treatment. Consider reevaluation of the oil water separator system to better ensure system capacity during rain events.
- Oils on the floor in the oil storage room should be cleaned up immediately when a spill occurs. This would include cleanup during an oil water separator backup. Residues on the floor could be tracked throughout the work area or outside the building during drum replacements. Occasional oil water separator backups due to excessive rainfall likely contribute to the problem. Suggestions to keep the oil room floor clean include:
    - Cleaning up spills and leaks immediately.
    - Use drum pads to contain oil spilled during transfers. This oil may be clean enough to drain out of the containment pad for reuse.
    - Reevaluate logistics of oil stored in the oil room. Consider container sizes, accessibility, and employee (user) input regarding easier approaches to keeping the room clean.
    - Seal the drain in the oil room that leads to the oil water separator to prevent backups into the room.

  Discussions with Mr. Weil indicated that they are currently working on the oil room issue.
- Underground storage tanks pose a risk to groundwater if they are not maintained. The paint waste tank has the potential to leak hazardous waste and should be inspected routinely.
- According to *VMC 14.26.120 Minimum Standards*, oil water separators shall be inspected, cleaned and maintained. Even though the oil water separator discharges to the sewer, it has connections to isolated, outside catch basins. A copy of operating guidelines for *Oil/Water Separators - Inspection and Maintenance* is included as a reference to establish or improve oil/water separator maintenance.

ACTION ITEMS:

1. Add the City of Vancouver Water Resources Protection Program phone number (696-8008) to Columbia Machine's spill notification list. According to *VMC 14.26.120 Minimum Standards*, City notification should include any hazardous material releases in amounts that clearly impact surface water, stormwater, or groundwater.
2. Keep the methanol containment drain normally closed. Manually discharge only non contaminated stormwater to the adjacent drywell.
3. Submit to the City, at least three Material Safety Data Sheets for the most abundantly used paints along with typical volumes of paint stored and used on site.
4. Submit to the City, a copy of the last 2 bill of ladings or hazardous waste manifests that included hazardous wastes other than used oil.
5. Clean up the oil on the floor in the oil room and, if necessary, develop new procedures to keep it clean.
6. Document routine inspections of the underground paint waste tank.
7. Document routine inspections of the oil water separator.
8. Sent submittals to:

   Annette Jakubiak
   City of Vancouver - Ops Center
   P.O. Box 1995
   Vancouver, WA 98668

The City staff is available to assist property owners, business owners, and managers in addressing action items identified in the Inspection Report. Requests for technical assistance can be directed to Annette Jakubiak in the Water Resource Protection Program.

Report completed by:	_____	Date:	_____
Report reviewed by:	_____	Date:	_____